IN THE CLAIMS

1. (Original) An electromagnetic interference (EMI) shield comprising:

a waveguide body including an array of waveguide cells each having a contiguous inner surface; and

an absorber layer covering at least a portion of each contiguous inner surface and capable of absorbing electromagnetic radiation over a select frequency range.

2. (Original) The shield of claim 1, wherein each waveguide cell has a polygonal cross-section.

3. (Original) The shield of claim 1, wherein each waveguide cell has a circular cross-section.

4. (Original) The shield of claim 1, wherein the polygonal cross-sectional shape is rectangular.

5. (Original) The shield of claim 1, wherein the absorber layer covers the entire contiguous inner surface.

6. (Original) The shield of claim 1, wherein the absorber layer has a thickness between about 0.025 millimeters to about 0.25 millimeters.

7. (Original) The shield of claim 1, wherein the absorber layer has a resistivity between about 200 Ohms/square and about 1200 Ohms/square.

8. (Original) The shield of claim 1, wherein the waveguide body is formed of an insulating material.

9. (Original) The shield of claim 8, wherein the insulating material is one selected from the group of materials consisting of: plastic, polymer, composite material, ceramic, wood and glass.

10. (Original) The shield of claim 1, wherein the select frequency range includes frequencies in the megahertz (MHz) range and the gigahertz (GHz) range.

11. (Original) The shield of claim 1, wherein the absorber layer includes an epoxy resin filled with particles having a high magnetic loss over the select frequency range.

12. (Original) The shield of claim 1, wherein the body is formed of metal.

13. (Original) An electromagnetic interference (EMI) shield, comprising:

an array of waveguide cells each having a contiguous inner surface;

an absorber layer covering at least a portion of each contiguous inner surface, the absorber layer capable of absorbing electromagnetic radiation over a select frequency range.

14. (Original) The shield of claim 13, wherein the absorber layer entirely covers each contiguous inner surface.

15. (Original) The shield of claim 13, wherein the waveguide cells have a cross-sectional shape that is one of polygonal and circular.

16. (Original) The shield of claim 13, wherein the waveguide cells are formed from an insulator.

17. (Original) The shield of claim 13, wherein the absorber layer has a thickness between about 0.025 millimeters to about 0.25 millimeters.

18. (Original) The shield of claim 13, wherein the select frequency range includes frequencies in the megahertz (MHz) range and the gigahertz (GHz) range.

19. (Original) An electromagnetic interference (EMI) shield for a computer, comprising:

a metal chassis having an aperture, the chassis adapted to enclose portions of the computer that generates heat and EMI over a select frequency range; and

an EMI waveguide shield fixed to the chassis and covering the aperture, the EMI waveguide shield including an array of waveguide cells each having a contiguous inner surface, and an absorber layer covering at least a portion of each contiguous inner surface, the absorber layer capable of absorbing the EMI.

20. (Original) The EMI shield of claim 13, wherein each waveguide cell has an associated aperture that allows heat to pass therethrough.

21. (Original) The EMI shield of claim 19, further comprising the computer.

22. (Original) The EMI shield of claim 19, wherein the waveguide shield includes a body formed from an insulator.

23. (Original) A method of reducing electromagnetic interference (EMI) from a computer, comprising:

enclosing portions of the computer that generate heat and EMI over a select frequency range with a metal chassis having an interior;

introducing the EMI and heat to an array of waveguide cells fixed to the chassis, each waveguide cell having an aperture leading from the interior and a contiguous inner surface at least partially coated with an absorber layer that absorbs the EMI over the select frequency range; and

absorbing the EMI with the absorber layer to substantially contain the EMI within the interior, while allowing the heat to pass from the interior through each aperture.

24. (Original) The method of claim 23, further including covering the entirety of each inner surface with the absorber layer.

25. (Original) The method of claim 23, including forming the absorber layer to have a thickness between about 0.025 millimeters and 0.25 millimeters.

26. (Original) The method of claim 23, including fixing the waveguide cells to the chassis with screws.

27. (Previously Presented) An electromagnetic interference (EMI) shield comprising:

an insulating substrate having a plurality of apertures;

absorbing waveguide means covering at least a portion of the substrate for absorbing electromagnetic radiation over a select frequency range.

28. (Previously Presented) The shield of claim 27, wherein the absorbing means includes an epoxy resin filled with particles having a high magnetic loss tangent over the select frequency range.

29. (Previously Presented) The shield of claim 27, wherein the absorbing means has a resistivity between about 200 Ohms/square and about 1200 Ohms/square.

30. (Previously Presented) The shield of claim 27, wherein the absorbing means has a resistivity of about 900 Ohms/square.

31. (Previously Presented) The apparatus of claim 27, further comprising:

a computer having at least one CPU chip, wherein the enclosure substrate forms at least a portion of an enclosure for the computer.

32. (Previously Presented) The apparatus of claim 27, wherein the absorbing means has a thickness between about 25 micrometers and 250 micrometers.

33. (Previously Presented) The apparatus of claim 27, wherein the absorbing means covers at least a portion of walls of a plurality of the apertures while leaving openings in those apertures for air circulation.

34. (Previously Presented) The apparatus of claim 27, wherein each one of a plurality of the apertures has a through opening approximately two and a half centimeters high by approximately two and a half centimeters wide by approximately 2 centimeters deep.

35. (Previously Presented) The apparatus of claim 27, wherein each one of a plurality of the apertures forms a triangular aperture.

36. (Previously Presented) The apparatus of claim 27, wherein each one of a plurality of the apertures forms a rounded aperture.

37. (Previously Presented) The apparatus of claim 27, wherein the absorbing means provides significant EMI shielding benefits above 4.5 GHz.

38. (Previously Presented) The apparatus of claim 27, wherein the absorbing means provides significant EMI shielding benefits over a frequency range of at least from 4.5 GHz to 10 GHz.

39. (Previously Presented) The apparatus of claim 27, wherein the substrate is made of an insulating material.

40. (Previously Presented) The apparatus of claim 27, wherein the substrate is a molded plastic.

41. (Previously Presented) The apparatus of claim 27, wherein the substrate is made of a metal.

42. (Previously Presented) The apparatus of claim 27, wherein the substrate is made of aluminum.

43. (Previously Presented) The apparatus of claim 31, wherein the apertures are sized to provide both adequate blockage of EMI as well as adequate ventilation for the computer.

44. (Previously Presented) The apparatus of claim 27, wherein the absorbing means includes a plurality of layers of different EMI-absorbing materials.

45. (Previously Presented) The apparatus of claim 1, wherein the absorber layer includes a plurality of different EMI-absorbing layers.

46. (Previously Presented) An apparatus having an electromagnetic interference (EMI) shield, comprising:

a computer enclosure, the computer enclosure including a vent having a plurality of apertures and a shape that provide ventilation from an interior of the enclosure to outside while reducing EMI emissions through the vent, wherein the vent includes an EMI-absorbent material capable of absorbing electromagnetic radiation over a select frequency range.

47. (Previously Presented) The apparatus of claim 46, wherein the absorbent material is formed as an EMI-absorbent surface layer on a substrate formed in the shape of the vent.

48. (Previously Presented) The apparatus of claim 47, wherein the surface layer comprises a plurality of non-identical layers.

49. (Previously Presented) The apparatus of claim 47, wherein the substrate is formed from an insulator.

50. (Previously Presented) The apparatus of claim 47, wherein the absorbent surface layer comprises a
C-RAM-type material

51. (Previously Presented) The apparatus of claim 47, wherein the absorbent surface layer has a thickness between about 25 micrometers and about 250 micrometers.

52. (Previously Presented) The apparatus of claim 46, wherein the computer enclosure includes

a metal chassis having an aperture, the chassis adapted to enclose portions of the computer that generates heat and EMI over a select frequency range; and the vent is a ventilated waveguide array that is fixed to the chassis and covering the aperture.

53. (Previously Presented) The apparatus of claim 46, wherein the waveguide array comprises a plurality of cells that have a cross-sectional shape that is rounded.

54. (Previously Presented) The apparatus of claim 46, wherein the waveguide array comprises a plurality of cells that have a cross-sectional shape that is polygonal.

55. (Previously Presented) The apparatus of claim 46, further comprising a computer having at least one CPU chip.

56. (Previously Presented) The apparatus of claim 48, further comprising a computer having at least one CPU chip.